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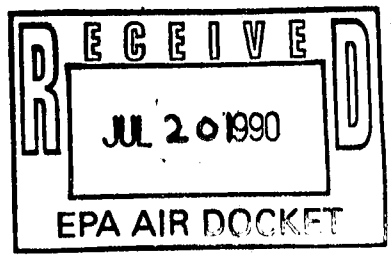
July 20, 1990



Public Docket A-90-16
Air Docket (LE-131)
Room M-1500
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: Comment on Request of Ethyl Corporation Dated May 9, 1990 for Fuel Additive Waiver, Clean Air Act Section 211(f)(4)

Dear Sir or Madam:

The Ferroalloys Association submits these comments on the waiver request of Ethyl Corporation for the use of HiTEC 3000, a manganese-containing fuel additive, because allegations at the June 22, 1990 public hearing falsely suggest that manganese is a public health problem. The Ferroalloys Association, whose members compete in the worldwide ferroalloys market, including ferromanganese, are not in a position to comment on the benefits of Ethyl's product. However, the ancillary issue of the health effects of manganese is one of considerable importance to our members. Three of the Association's member companies are members of the International Manganese Institute in Paris, France, an organization of manganese producers that studies health issues relating to manganese.

1. Manganese cannot be judged by the hazards associated with lead.

At the June 22, 1990 hearing, Ethyl Corporation's application was characterized as "deja vu," as proposing in 1990 a metal bearing fuel additive just as Ethyl did in 1921 when it introduced tetraethyl lead as a fuel additive. The testimony of the Environmental Defense Fund unjustifiably implied that manganese could be placed in the same class as lead as a public health issue, and that the waiver application should therefore be denied.

Lead and manganese cannot be so compared. Manganese is an essential nutrient that is part of the body chemistry, is purposely added to the diet and is important to growth and metabolism as well as certain embryonic developmental needs. Lead has no such beneficial functions in the human body. Indeed, lead is systemic poison at low exposure levels, and manganese is not. Regulatory agencies treat lead and manganese very differently from one another, as the following table shows:

	Lead	Manganese
EPA Ambient Air Quality Standard ug/m^3	1.5	not regulated
OSHA worker exposure limits (air) ug/m^3		
compounds	50 (TWA)*	5000 (ceiling)
fume	50 (TWA)	1000 (TWA)
ACGIH recommended exposure limits (air) ug/m^3		
dust & compounds	150 (TWA)	5000 (TWA)
fume	150 (TWA)	1000 (TWA)
NIOSH IDLH levels (immediately dangerous to life and health) ug/m^3	300,000	10,000,000
FDA GRAS (generally regarded as safe for food additives) number of compounds	0	5
EPA - No. of hazardous wastes listed for this element or its components	17	0

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*/ TWA = 8-hour time-weighted average

It is clear that manganese and lead cannot responsibly be viewed as interchangeable, and that conclusions about the toxicology of manganese cannot be drawn from the lead experience.

2. The ambient levels of manganese are not a public health concern.

To use manganese as a basis for denying the waiver request would require EPA to conclude the ambient levels of manganese are already a problem, because Ethyl's calculations show a minuscule increment of manganese resulting from use of the additive, even if it is used in every gallon of gasoline sold in the United States. EPA's 1984 Health Assessment Document for manganese demonstrates that, in fact, ambient manganese levels in the air are far below the lowest levels at which any health effects have been observed.

Exposure to manganese can result in a neurological disorder with symptoms similar to Parkinsonism. However, these neurotoxic effects occur only at high levels of manganese exposure. This is understandable in light of the fact that the normal body burden of manganese is approximately 12,000 ug (micrograms) of manganese in the body of a 155 lb. male, and that the normal daily intake is in the range of 2000 - 4000 ug of manganese.

All verified cases of manganism, the symptomatology for neurotoxicity from manganese exposure, have occurred from sustained occupational exposure to levels of 2000 - 5000 ug/m^3 manganese. By contrast, according to EPA's 1984 Health Assessment Document, levels of manganese in the ambient air in the United States average less than 0.1 ug/m^3, with averages approaching 0.3 ug in urban environments that have a significant point source of manganese. This concentration is markedly below even the level that EPA concluded in the 1984 Health Assessment Document is suggested as a lowest observable effects level, 300 ug/m^3.

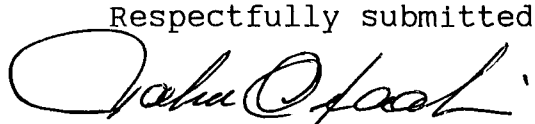
Nor is manganese in the ambient water environment a public health problem. EPA's drinking water standard for manganese, 50 ug/l, is based on esthetic considerations such as taste and discoloration of laundry. The vast majority of manganese in surface and ground water comes from natural sources,

since manganese is the twelfth most common element in the earth's crust. EPA's Resource Conservation and Recovery Act regulations, which are directed at protecting the water and air from hazardous constituents of wastes, do not list any wastes as hazardous due to manganese content, and do not include manganese as a hazardous constituent.

3. EPA's decision in this proceeding should be not based on manganese as a health issue.

EPA's primary responsibility in this proceeding is to determine whether the fuel additive for which Ethyl is seeking a waiver under Section 211(f)(4) of the Clean Air Act will affect the ability of automobiles and their pollution control devices to meet the air pollution standards for which they were certified. It appears from the record that this should not be a reason to deny Ethyl's waiver request. Interested parties, such as the Environmental Defense Fund (EDF), sought at the hearing to transform this proceeding into a forum where Ethyl must demonstrate that manganese is safe and that the use of Ethyl's product will not add manganese to the environment. Although EPA is obliged to make decisions that reflect its duty as an agency charged to protect the environment, EDF's approach would be a wrong course for EPA. Such a test is not found in the Clean Air Act. If EPA were to deny Ethyl's waiver request and blame its action on manganese, or on Ethyl's failure to satisfy the burden of proof respecting manganese that EDF has fabricated, the public would be given a distinctly erroneous impression that it should be concerned about manganese. As discussed above, and as developed more fully in the comments of the Ferroalloys Association's member, Chemetals, manganese is not a public health concern at current environmental levels, or at the minutely increased levels that would result from granting Ethyl's waiver application.

Respectfully submitted,



John Oxaal
President

cc: Mary T. Smith
Director, Field Operations
and Support Division (EN-397F)